

REMARKS

INTRODUCTION:

In accordance with the foregoing, claim 7 has been cancelled without prejudice or disclaimer and claims 1, 8, 10, 19 and 34 have been amended. Claims 1-6, 8-31 and 34-39 are pending and under consideration. Claims 7-14 and 18 are deemed allowable if rewritten in independent form. Claims 35-39 are allowed.

REJECTION OF CLAIMS 29-31 and 34 UNDER 35 U.S.C. § 101:

The Examiner's attention was previously drawn to MPEP 2106(IV)(B)(1) which clarifies "when functional descriptive material is recorded on some computer readable medium it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized." Thus, the MPEP indicates that a "mere" arrangement of data is non statutory, however, by recording this otherwise descriptive material on a computer-readable medium, the entire structure is statutory.

The Examiner has not responded by explaining why claim 29, which recites encoded data, is not statutory under this MPEP section. Such an explanation is respectfully requested.

The Examiner's attention is further drawn to MPEP section (2106)(IV)(B)(1)(a)), which indicates that the claimed data structures do not fall under the category of nonfunctional descriptive material. Specifically, MPEP 2106(IV)(B)(1)(a) distinguishes between data structures which are not claimed as being embodied in a computer readable medium (descriptive material per se) and a computer readable medium encoded with a data structure (functional and therefore statutory).

The Examiner has not responded by explaining why the encoded data structure of claim 29 is not statutory according to this MPEP section. Such an explanation is respectfully requested.

Applicants previously relied upon *In re Lowry*, 32 USPQ 2d 1031 (CAFC 1994). In *In re Lowry*, there was a claim to a data structure stored in memory which included information. The

Federal Circuit held that data structures are specific electrical or magnetic elements in a memory. The Examiner has not responded by explaining why the present case is distinguishable from *In re Lowry*. Such an explanation is respectfully requested.

In the present Office Action, the Examiner states that the error correction block does not provide any encoding function. However, it is respectfully submitted that it is not required that the error correction block provide an encoding function. MPEP 2106(IV)(B)(1)(a) states that a computer readable medium encoded with a data structure is functional and therefore statutory. Thus, it is not necessary for the error correction block to provide an encoding function in order for claim 29 to be statutory.

Accordingly, withdrawal of the rejection is requested.

REJECTIONS UNDER 35 U.S.C. §112, SECOND PARAGRAPH:

Claims 1-18 and 34 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is respectfully submitted that the present amendments to claims 1 and 34 overcome the rejection.

REJECTIONS UNDER 35 U.S.C. §103:

Claims 1-6, 15-16, 19-27 and 29 and 34 are rejected under 35 U.S.C. §103(a) as being unpatentable over Kuroda et al.

Independent claim 1 recites "interleaving a plurality of data groups and the plurality of PIs in the PI direction in the error correction blocks having PIs and Pos." It is respectfully submitted that Kuroda et al. does not recite these features. It is noted that these features were recited in "objected to" claim 7.

Accordingly, withdrawal of rejection of independent claim 1, and claims 2-6 and 15-16 depending therefrom is requested.

Independent claim 29 is directed to an HD-DVD having an error correction block structure to correct a burst error in the HD-DVD. According to the Examiner, it would have been obvious to use the error correction process of Kuroda et al. in an HD-DVD. Applicants

respectfully disagree.

The error correction process of Kuroda et al. is similar to that of the related art described in the present Background of the Invention, and illustrated in present FIG. 1 (Prior Art). In fact, FIG. 1B of Kuroda et al. is the data block of present FIG. 1, with the same dimensions and PI and PO corrections. Due to the relatively small size of the beam in an HD-DVD and the high line density, the probability of error occurrence by a small defect such as dust becomes 8.148 times greater in an HD-DVD as compared to a DVD. Thus, the number of columns must be increased in the PI direction, however, when this number exceeds 256, a Galois Field operation cannot be performed. Present Specification, pages 3-4.

Thus, correcting a burst error in an HD-DVD involves more than simply applying the conventional error correction method to this type of disc. Accordingly, withdrawal of the rejection is requested.

Independent claim 19 is patentable over Kuroda et al. at least for similar reasons as discussed with respect to claim 29.

Claim 17 is rejected under 35 U.S.C. §103(a) as being unpatentable over Kuroda et al. in view of Ozaki et al. Claim 28 is rejected under 35 U.S.C. §103(a) as being unpatentable over Kuroda et al. in view of Hoshino et al.

These claims depend from independent claims which are distinguishable from Kuroda et al. as discussed above. It is respectfully submitted that the secondary references do not overcome the above deficiencies in Kuroda et al., and it is noted that the Examiner does not rely upon these references for this purpose.

CONCLUSION:

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

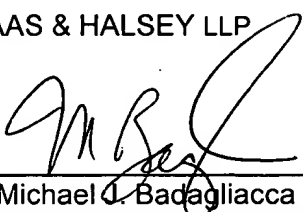
Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

STAAS & HALSEY LLP

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By: 
Michael J. Badagliacca
Registration No. 39,099

1201 New York Avenue, NW, Suite 700
Washington, D.C. 20005
(202) 434-1500
(202) 434-1501